

C L A I M S

1. Process to prepare a base oil having a viscosity index of above 80 and a saturates content of above 90 wt% from a crude derived feedstock by
 - (a) contacting a crude derived feedstock in the presence of hydrogen with a catalyst comprising at least one Group VIB metal component and at least one non-noble Group VIII metal component supported on a refractory oxide carrier;
 - (b) adding to the effluent of step (a) or part of the effluent of step (a) a Fischer-Tropsch derived fraction boiling at least partly in the base oil range in an amount effective to achieve the target viscosity index of the final base oil; and
 - (c) dewaxing the mixture as obtained in step (b).
- 15 2. Process according to claim 1, wherein the crude derived feedstock is a vacuum distillate fraction or a de-asphalting vacuum residue as obtained from the residue of the atmospheric distillation of a crude petroleum feed.
- 20 3. Process according to any one of claims 1-2, wherein the viscosity index of the crude derived feedstock is below 60.
4. Process according to any one of claims 1-3, wherein the conversion in step (a) is between 20 and 80 wt%.
- 25 5. Process according to any one of claims 1-4, wherein in step (a) the crude derived feedstock is first subjected to a hydrotreating step prior to the hydrocracking step.
6. Process according to claim 5, wherein the conversion in the hydrotreating step is below 30 wt%.

- 23 -

7. Process according to any one of claims 1-6, wherein the kinematic viscosity at 100 °C of the mixture as obtained in step (b) is between 3 and 10 cst.
8. Process according to any one of claims 1-7, wherein 5 step (c) is performed by means of catalytic dewaxing.
9. Process according to any one of claims 1-8, wherein the dewaxed product of step (c) is subjected to an additional hydrogenation treatment step (d).
10. Process according to any one of claims 1-9, wherein the Fischer-Tropsch derived fraction is obtained by hydroisomerization of a Fischer-Tropsch synthesis product.
11. Process according to any one of claims 1-10, wherein the Fischer-Tropsch derived fraction is a partly 15 isomerised Fischer-Tropsch fraction boiling for more than 90 wt% above 300 °C, having a congealing point below 80 °C and a wax content of below 50 wt%.